CK BIRLA GROUP | ORIENT CEMENT

Ref: OCL/ENV/2024-25/971

Date: 25/09/2024

To,
Member Secretary,
Karnataka State Pollution Control Board
#49, 4th & 5th floor.
Parisara Bhavan, Church Street
Bengaluru-560001

Dear Sir,

Sub: Environment Statement Report (Form-V) of Plant & Mines for the financial year 2023-2024: -Reg

Ref-1: GOI Notification No. G.S.R.329(E) Dt.13.03.1992 & G.S.R.386 (E) Dt.28.04.93 of MOEF, New Delhi

*****

With reference to the above cited subject and vide reference- 1, **M/s Orient cement Ltd,** Chittapur, is here by submitting the **Environmental Statement/Audit Report-Form V** of **Captive Limestone Mines & Cement Plant** for the financial period **1st April 2023 to 31st March 2024.**

Kindly find the enclosed Environmental statement report for your perusal & acknowledge the receipt of the same.

Thanking You,

Yours Faithfully,
For Orient Cement Ltd

25th Sep 2024

Satyabrata Sharma
President-Manufacturing & Unit Head

Copy to:

1. Additional Principal Chief Conservator of Forests (C),
   Ministry of Environment & Forest, Govt. of India
   Regional office (Southern zone)
   Kendriya Sedan, IV th Floor, E & F Wings,
   17th Main Road, II Block, Koramangala, Bangalore-560034

2. Environmental officer,
   Karnataka State Pollution Control Board,
   Plot no 12/2,SY. No.19/P Mansafdar layout
   MG Road, Santraswadi , Kalaburagi- 585 101.

REGIONAL OFFICE Letter No. Date 26/9/2024 KALABURAGI Karnataka State Pollution Control Board

O/c Environment Dept

ENVIRONMENTAL STATEMENT REPORT

FOR

CEMENT PLANT
(FORM-V)

[YEAR 2023 - 2024]

REPORT BY

(Orient Cement Ltd.)

Captive Limestone, Clinkerisation,
Cement Unit & Captive Power Plant

Itga (V), Chittapur (Tq)
Kalaburagi (Gulbarga) - 585211

CK BIRLA GROUP

ENVIRONMENTAL STATEMENT REPORT

(Form-V)

[Year 2023 - 2024]

REPORT BY

ORIENT CEMENT

(Orient Cement Ltd.)
Captive Limestone, Clinkerisation,
Cement Unit & Captive Power Plant
Itga (V), Chittapur (Tq)
Kalaburagi (Gulbarga) - 585211

CONTENTS

Prologue

Orient Cement is a Green Field project by CK Birla Group and EHS policy reflects each & every section in the organization. Our main vision is to conserve the Environment through new technologies, new initiatives.

At National Level, great emphasis is being laid on maintaining environmental quality, particularly in the regions where large-scale developmental programs are being undertaken. Orient Cement has adopted corporate policy along with EHS policy, for conserving the Sustainable environment and its development.

Company aspires to exceed market expectations across all sustainability issues and go beyond legal compliance to proactively reduce our environmental impacts. Our goals are to reduce our overall carbon footprint by embedding Environmental controls and practices into the daily management of the firm and thereby encouraging positive behavior from our staff to achieve a greener culture.

In order to comply with Environmental Protection Act and Environmental Preservation and Sustainable Development, Orient Cement has prepared the Environmental Statement Report; this report is furnished in Form-V & along with the data for Environmental components like Air, Water, & Noise for the period of **April-2023 to March-2024**.

INTRODUCTION

Man is a part of nature, and not separate or independent; at the same time, man is unique in the influence he has over nature. Man derives all his food, clothing, shelter, and other amenities from nature. In that process, if he does not take care to protect and cherish nature, but decrease or destroys, he will find that his own life and that of his children is in jeopardy.

The environment, a word as it stands today is not simple; it is not a fashionable word, but has got established definitions incorporates limitless complexities, bear definite power to put everybody under a flood of worries and pushes us to plan for betterment with minimum problems. The environment is now catching for all, the industry, the government, the people. Hence, it is joint responsibility to protect, preserve the environment and avoid perishing the natural treasures. At this critical junction of time and efforts, the Indian industry has fulfilled its commitment in maintaining the environmental integrity.

Orient Cement Limited considers itself responsible for Environment and Society. We are committed to emission reduction, climate protection, effective energy management, responsible use of resources and its conservation keeping in mind that "**Today's Need – Future of Our Children**".

The next few pages of this Environment Statement Report (ESR) of Orient Cement Limited is based on actual data and verified record, will present a picture of more optimism for environmental care than ever before.

Orient Cement Ltd: is situated at Itga Village, Chittapur Taluk, Gulbarga District: which is about 50 Km from Gulbarga. It started its commercial operation in the year 2015. Presently factory is operating with one Kiln of capacity 6000 TPD & 50MW Power Plant. The Company is manufacturing Ordinary Portland Cement (OPC) & Pozzolana Portland Cement (PPC).

M/s Orient Cement Ltd is operating limestone mine at Itga (V), Chittapur Taluk and Gulbarga District as captive mines for their Cement manufacturing at factory, which is about 02 Km from

Mines. This mine is being operated using a mechanized open cast method with heavy equipment like hydraulic excavators, dozers, and dumpers.

OCL Chittapur is certified with Quality Management System (ISO 9001:2015), Environment Management System (ISO 14001:2015) and Occupational health and Safety Management System (ISO 45001:2018), Facility management System(ISO 41001:2018), Energy Management System (ISO 50001:2018) certification from BSI and Information Security Management System standard: ISO/IEC 27001:2013.The new integrated cement manufacturing unit at Chittapur is equipped with new state of the art technology and latest energy- efficient equipment.

Cement manufacturing contributes significantly to the Air pollution level only in the vicinity of the works as large quantity of pulverized materials is handled at each stage of manufacturing that is from crushing of Raw material to final packing of cement resulting emission of dust leading to Air pollution. This is due to very nature of cement manufacturing.

Apart from dust, combustion product and coal used in the kiln to burn Raw materials give rise to formation of SOx and NOx. The Sulphur content of Coal would vary from source to source. However, the alkaline nature of Raw materials leads to direct absorption of SOx.

The dust emitted from various machines is controlled by providing hi-tech air pollution control equipments such as Electrostatic precipitators and bag house. The emission sources in the cement plant are mainly process dust emission and fugitive dust emissions.

Water Pollution is virtually absent in the cement plant as no liquid effluents are seriously involved & CPP liquid effluents is treated used in dust suppression. The water is used for cooling the machines/parts of the machines. A WTP – Cooling Water Tower is being maintained for the circulation of water for the entire plant. The major area of domestic water consumption inside the plant is for drinking, toilet, for canteen use & Colony.

The policy for the abatement of pollution by the government of India provides for submission of environment statement by all the industries. Environmental Statement is therefore an output of Environmental Audit.

So, an effort has been made in this report to explain Environmental Statement for the financial year 2023-2024 ended 31st March 2024 as per Government of India notification GSR 329 (E), dated 13th March 1992 and amendment to Environmental (Protection) Rules 1986 and subsequent amendment there on.

CK BIRLA GROUP

ORIENT CEMENT

ORIENT CEMENT LIMITED

CORPORATE ENVIRONMENT, HEALTH & SAFETY POLICY

Scope:

This Policy applies to all Plant locations and Operations of Orient Cement Ltd where we exercise management control.

Our Commitment - At Orient Cement Limited, our priority towards Environmental Protection, ensuring Health & Safety of Employees, Stakeholders, Contractors, Visitors, Associates, and community by way of:

- ✓ Ensuring Compliances to all applicable Legal & Statutory, Social, and other requirements.
- ✓ Improvement in Environmental performance and resource efficiency.
- ✓ Reviewing of Objectives, Targets for continual improvements towards Environment, Workplace, Health and Safety.
- ✓ Providing Safe workplace and technology for efficient use of natural resources, energy consumptions, promoting waste to energy and recycle of wastes.
- ✓ Engaging & Training Human capital to enhance their skills and augment resources for effective EHS performance.
- ✓ Continual measures for prevention of occupational injuries and Health Hazards.
- ✓ Pollution control measures for protecting clean and green environment.

SATYABRATA SHARMA

PRESIDENT - MANUFACTURING

1st Nov'22

CK BIRLA GROUP

ORIENT CEMENT

ORIENT CEMENT LIMITED

CORPORATE POLICY ON CARBON FOOTPRINT REDUCTION

Orient Cement Limited committed towards climate change, explore, adoption of technologies and input processing materials which reduce carbon footprint,

- ✓ Identify and implement Low carbon technology and processes across all the Plants.
- ✓ Measure and Monitor Carbon footprint numbers and new plans identify, plan and to reduce future Carbon footprint numbers.
- ✓ Adopt aggressive abatement actions to reduce life cycle footprint and drive growth through best practices and innovation.
- ✓ Identify and implement on continuous sustainability projects.
- ✓ Awareness, knowledge sharing of best practices towards reduction of impact of climate change and adherence to Global warming temperature below 2^0C.

SATYABRATA SHARMA

PRESIDENT - MANUFACTURING

1st Nov'22

CK BIRLA GROUP

ORIENT CEMENT

ORIENT CEMENT LIMITED

CORPORATE WATER MANAGEMENT POLICY

Orient Cement Limited believes that water is the root of every life on earth and so providing good quality water on sustainable basis for improvement of the Health & safety of employees, stakeholders and ecosystem is our ethical responsibility.

We committed to:

- Measure, Monitor and Minimise water consumption and performance of operations.
- Adherence to water regulations and laws.
- Follow Reduce, Re-Use & Recycle water consumption.
- Continual improvement of water management across all the plants through adoption of best practices, effective & economical management systems, and methods of Rain harvesting.
- Create awareness among employees and local community on importance of water conservation.
- Conducting regular Water Accounting audits.

SATYABRATA SHARMA

PRESIDENT - MANUFACTURING

1st Nov'22

CK BIRLA GROUP

ORIENT CEMENT

ORIENT CEMENT LIMITED

CORPORATE GREEN PROCUREMENT POLICY

Orient Cement Limited ensures & practices potential environment and associated impacts while purchasing Products & Services in the supply chain.

We committed to:

- Continuous creation of awareness on Environment and its impacts.
- Measures towards reduction of foot print by Energy efficiency appliances and water conserving equipment.
- Procurement and sourcing of Raw materials from nearby sources to reduce vehicle movement/diesel consumption and encourage local stake holders.
- Measures towards increase the Rail mode for incoming and out going material transportation.
- Create awareness among the suppliers to use of biodegradable material for packing.
- Explore and Increase the procurement of AFR/Hazardous waste materials for cement manufacturing process.
- Green supply chain with increase in bulk transportation.
- Purchase & replacement of equipment that have higher energy efficiency.

SANDEEP KOTHARI

1st Apr'21

ENVIRONMENTAL STATEMENT REPORT

[FORM-V]
(See rule 14)

PART-A

Name and address of the owner/ Occupier of the industry	:	**Satyabrata Sharma** **President – Manufacturing & Unit Head** **Itga (V), Chittapur (Tq)** **Gulbarga - 585211**
Operation process	:	**Production of Cement**
i. Industry category: Primary- (STC code) Secondary-(STC code)	:	**Red category**

ii. Production category-units

Cement plant	:	**2.1125 MTPA of Clinker**
	:	**3.0 MTPA of Cement**
Captive Power Plant	:	**50 MW**
Waste Heat Recovery System	:	**14MW**

iii. Year of establishment

Cement plant	:	**Sept 2015**
Captive Power Plant	:	**Feb 2016**

iv. Date of last environmental statement submitted: **05/08/2023 for the year (2022-2023)**

Postal Address

1) Registered Office	:	Orient Cement Ltd. 5-9-22/57/D G.P Birla Center 2nd & 3rd floor. Adrash Nagar, Telangana Hyderabad - 500063
2) Factory	:	**Orient Cement Ltd.** **Itga (V), Chittapur (Tq)** **Gulbarga - 585292** **Phone: 08474-236716** **Fax: 08474-236716**

PART-B

Water Reservoir at Plant (Water from Kagina River & Natural water due to mining operations) is the major source of water for this factory. Due to moderate rainfall in this region, there is always drastic variation in the yield of water from these sources and almost this area is suffering from water shortage. In this view company is also operating a Sewage Treatment Plant & Effluent Treatment Plant to treat the entire wastewater of the factory and colony, so that it can be recycled and reused for cooling the machines, gardening and for abatement of pollution in the area.

The water consumption for the year **2023-2024** is shown in the table given below and the consumption of water is measured with the help of water meters which are installed at different points of sources. Water consumption readings are being sent to the State Pollution Control Board in the monthly return.

(i) Water Consumption (m^3/day):

Being a complete dry process cement manufacturing plant does not require any process water. Water consumption in the plant for cooling, boiler feed, gardening etc is as follows.

Sl.No	Description	During Previous Financial Year 2022-2023 (m^3/day)	During Current Financial Year (2023-2024) (m^3/day)
	Water consumption in m^3 / d or KLD	2425.721	1847.960
1.	a) Process/Cooling	2012.691	1480.910
	b) Domestic/Gardening	413.03	367.040

Note: OCL is permitted to withdraw water from river Kagina at the rate of 5.56 MLD, the renewal application was submitted & got the approval on 29th of January 2024 from Water Resource Department, Government of Karnataka.

Name of products	Process water consumption per unit of products output	
	During the Previous financial year (2022-2023)	During the current financial year (2023-2024)
Cement	0.27 KL/Ton	0.170 KL/Ton
Power (CPP)	0.33 KL/MWH	0.35 KL/MWH
Power (WHRS)	--	0.69 KL/MWH

Note: CPP – Captive Power Plant and WHRS – Waste Heat Recovery System

(ii) Raw material consumption per ton of product

Name of raw materials	Name of products	Consumption of raw material per unit of (Clinker) output	
		During the Previous financial year (2022-23)	During the current financial year (2023-24)
Limestone	Clinker	1.387	1.357
Laterite		0.058	0.068
Bauxite		0.041	0.037
Coal		0.000	0.001
Pet coke		0.085	0.080
AFR & Other waste		0.013	0.020
Red mud		0.033	0.036

Name of raw materials	Name of products	Consumption of raw material per unit of (Cement) output	
		During the current financial year (2022-2023)	During the current financial year (2023-2024)
Limestone	Cement (OPC & PPC)	1.100	1.068
Laterite		0.046	0.054
Bauxite		0.033	0.029
Coal		0.000	0.001
Petcoke		0.067	0.063
AFR & Other waste		0.010	0.015
Clinker		0.793	0.787
Fly Ash		0.126	0.117

Gypsum		0.035	0.037
Slag		0.029	0.052

Name of raw materials	Name of products	Consumption of raw material per unit of (Power) output	
		During the Previous financial year (2022-2023)	During the current financial year (2023-2024)
Coal	Power	0.960 MT/MWH	0.936 MT/MWH

PART-C

The impact of the cement plant pollution on the environment is limited to its immediate surrounding areas. In reality dust pollution is the only environmental problem in & around the plant. Although the dust produced while manufacturing cement is nontoxic, nonflammable, and non-corrosive. It does constitute a nuisance to a little extent. So, the company has adopted several technological measures to completely avoid the dust emission at the source itself.

Water pollution is virtually absent as no liquid effluent are seriously involved. The water here is used for cooling the machines/parts of the machine. A WTP – Cooling Tower is being maintained for the circulation of water for the entire plant. The major area of domestic water consumption inside the plant is for domestic (Drinking, Toilet, Colony and for Canteen use).

The company is monitoring the dust level concentration at all the emission sources by batch sampling technique. The quantity of pollutants discharged is calculated at an average emission level taken from monthly stack monitoring reports.

Pollution discharged to environment/unit of output: (Parameter as specified in the consent issued).

	Pollutants	Quantity of pollutants discharged (Mass/day)	Concentration of pollutants in discharge (Mass/Volume)	Percentage of variation from prescribed standards with reasons
a) WATER: -				
	Outlet effluent of sewage treatment plant	118.11 KL/day	----	----
1.	pH		8.48 mg/L	Within Standard
2.	BOD 3 days at 27°C		7.89 mg/L	Within Standard
3.	COD		23.58 mg/L	Within Standard
4.	Ammonical Nitrogen		0.92 mg/L	Within Standard
5.	Total Nitrogen		3.93 mg/L	Within Standard
6.	Phosphate		0.90 mg/L	Within Standard
7.	Fecal Coliforms		6 MPN/100ML	Within Standard
b) AMBIENT AIR: -				
1.	Near Main Gate	PM10	71.80 µg/Nm^3	Within Standard
		PM2.5	25.39 µg/Nm^3	Within Standard
		SO2	12.55 µg/Nm^3	Within Standard
		NOx	12.94 µg/Nm^3	Within Standard
		CO	0.75 mg/Nm^3	Within Standard
2.	Near Coal Yard	PM10	68.25 µg/Nm^3	Within Standard
		PM2.5	22.59 µg/Nm^3	Within Standard
		SO2	12.55 µg/Nm^3	Within Standard
		NOx	13.09 µg/Nm^3	Within Standard
		CO	0.75 mg/Nm^3	Within Standard
3.	Near Dispatch Gate	PM10	71.73 µg/Nm^3	Within Standard
		PM2.5	23.52 µg/Nm^3	Within Standard
		SO2	12.82 µg/Nm^3	Within Standard
		NOx	12.51 µg/Nm^3	Within Standard
		CO	0.74 mg/Nm^3	Within Standard

4.	Near CPP plant	PM10	67.26 µg/Nm^3	Within Standard
		PM2.5	23.21 µg/Nm^3	Within Standard
		SO2	12.79 µg/Nm^3	Within Standard
		NOx	12.32 µg/Nm^3	Within Standard
		CO	0.75 mg/Nm^3	Within Standard

*** The value represents arithmetic average of 12 months for the financial year 2023-2024.**

Stack Gas Quality for Particulate Matter

CEMENT PLANT & CPP:

S.No	POLLUTANTS	QUANTITY OF POLLUTANTS DISCHARGED (m^3/H)-Flow	CONCENTRATIONS OF POLLUTANTS IN DISCHARGE (Mass/Vol.) (mg/Nm^3)	PERCENTAGE OF VARIATION FROM PRESCRIBED STANDARDS WITH REASONS
1.	Crusher	39649.48	5.54	Within Standards
2.	Kiln/Raw mill	330396.63	21.72	
3.	Coal mill	89293.01	18.27	
4.	Cement mill	139372.46	21.61	
5.	Packing plant	13118.34	16.25	
6.	Clinker cooler	260537.06	14.81	
7.	CPP	133311.76	44.30	

*** The value represents arithmetic average of 12 months for the financial year 2023-24**

PART-D

Hazardous Wastes

[As specified under Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, **2016 as Amended]**

Hazardous waste Generation	**Total Quantity MT/KL/No's**	
	During previous Financial Year 2022-2023	**During Current Financial Year 2023-2024**
Waste oil / used oil	2.20MT (Reutilized for internal machineries)	9.90MT (Reutilized for internal machineries)
Used Batteries	For the period Apr-2022 to Sep-2022 – 338 No.s For the period Oct – 2022 to March 2023 – 87 Nos.	For the period Apr-2023 to Sep-2023 – 30 No.s For the period Oct – 2023 to March 2024 – 36 Nos.

Name & Category of the waste	**Qty received & Co-processed in MT**
Hazardous waste(A)	
(20.1) Contaminated aromatic, aliphatic or Naphthenic solvents may or may not be fit for reuse	48.592
(28.1) Process residue & wastes	239.320
(28.6) Spent Solvent	194.400
(29.1) Process waste or residue	29.340
(36.1) Any Process or distillation Residue	137.066
AFR Pre-processed waste of organic/Inorganic waste/waste mixed liquids/ AFR raw materials facility/ Solid waste	1638.999
Subtotal (A)	**2287.717 MT**
Non-Hazardous/Other waste	
Rice Husk	5818.967
Soya Husk	1584.004
Tur Husk	1517.374
Coconut fiber	17.560
Agro Waste	31.316
Plastic waste	3930.430
Carbon Black	11163.517
Bag filter dust	1233.560
RDF/Municipal waste	13756.882
Tailor Cotton waste	1.505
Wood Chips	23.640
Saw Dust	14.340

Subtotal (B)	**39093.095**
Grand Total A+B	**41380.812**

The Waste oil generated at different sections in the plant is collected in the hazardous waste oil platform especially made for the purpose. Waste oil so collected in the leak proof container (M.S.Barrels) is being sold to the authorized reprocesses/recyclers KM Oils Pvt Ltd, Kalaburagi if generated in huge quantity. The waste oil generated is also reutilized in our plant machineries for lubrication purpose if the quantity is less. The details specifying the same is submitted via Form-IV to KSPCB vide our letter no **Ref: OCL/ENV/2024-25/896 dated 25/05/2024.**

New Batteries purchased from the dealers/agency during the period April-2023 to March-2024 has been submitted in Form VIII to Board on half yearly basis vide our letter no **OCL/ENV/ VP(Operation)/2023-24/810 Dated: 02.12.2023 & OCL/ENV/2024-25/898 Dated: 25.05.2024 respectively.**

PART-E

Solid Wastes

Sl.No	Solid Waste	Total Quantity	
		During the previous financial year 2022-23	**During the current financial year 2023-24**
1. (a)	From process **(Fly ash from captive Thermal Power Plant)**	Nil from Cement plant. #43846 MT from Power Plants	Nil from Cement plant. #42950 MT from Power Plants
(b)	Fly Ash from RTPS / NTPC/Kudgi/Raichur/Ramgondam/STPP	#278901 MT	#242673 MT
2.	From pollution control facility	100% recycled in to Process.	100% recycled in to Process.
3.	Quantity recycled or reutilized Within the unit	100% recycled in to Process.	100% recycled in to Process.
i	Sold	------	------
ii	Disposed	------	------

Fly ash utilization is improving continuously; this is observed from the consumption values of total Fly ash generated at our Power plant, RTPS, NTPC, Kudgi , Raichur , Ramagondam & STPP.

PART-F

Please specify the characteristics (in terms of composition of quantum) of Hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

Hazardous waste:

All used Oil generated from the different sections of plant is being collected in closed drums, barrels and then stored at Hazardous waste storage platform that has been made as per Hazardous Waste (Management, Handling & Trans boundary Movement) Rule, 2016. These stored hazardous wastes **are being sold to authorized recycler within the stipulated time / utilised for the machineries.**

Solid waste:

- There is no solid waste generated during the process of cement manufacturing process.
- In process, materials are recycled from pollution control equipment like ESP and Bag filters.
- The total generated fly ash & bottom ash are utilized for the manufacturing of cement.
- Refractory bricks and Mild steel scrap generated is disposed to party for further use/ recycling.

PART-G

Impact of pollution abatement measures taken on conservation of natural resources and on the cost of production

- Cement Production is being operated on dry process technology, which is cost effective and environmentally clean technology. The advantage of dry process is also in fuel economy. The stack emissions from the plant are controlled by equipment like Bag Houses, ESP's & Bag Filters installed at various material transfer points to arrest the fugitive emissions. The particulate matter collected in the pollution control equipment is recycled in process.
- All the raw materials are being stored in covered yard **by which reduction in fugitive emission is achieved**.
- The conveyor belts are fully covered **due to which fugitive emission is controlled.**
- Clinker and cement is being stored in silos due to which fugitive emission **is controlled**.
- Fogging system has been installed at Raw material handling area and conveyor belts for further reduction of fugitive emission.
- Water sprinkling for dust suppression on the road and other dust generation points in and around the plant is being done to control the fugitive emissions.
- Utilization of fly ash for the manufacturing of cement is being done to avoid landfilling of waste.
- Huge rain water harvesting pit of capacity 5.6 lakh cubic meter is developed in the plant for storing water during rainy season and utilization of the same is being done for plant, mines dust suppression, Gardening etc.
- Installed an STP of capacity 500 KLD in order to recycle or reuse the treated water for plantation purpose/Gardening Purpose etc.,
- Rainwater harvesting reservoir with a capacity 5,60,000m3 has been constructed at the plant area, for recharging ground and thereby reducing the consumption of surface water.
- Development of extensive green belt in and around the plant & Colony area to abate the pollution.
- Commissioned Waste Heat Recovery System through which waste heat from the cement manufacturing process is reutilised for power generation and thereby cost on fuel and production is reduced.

Modifications for the year 2023-24 for energy conservation and better Environment

Process:

- Intelligent flow controller in compressed air system for Post –Clinkerization and achieved energy savings of 12% annually.
- Replacement of existing pump with efficiency pump suggested by CII and achieved energy savings of 15 kWh absolute units daily.
- Replacement of screw conveyor system of packer no. 4 with air slides 6 and achieved energy saving of 4 kWh absolute units daily.

- Replacement of reversable belt conveyor with pneumatic diverting gate in Additive circuit leads to energy savings of 108 kWh absolute units daily
- Replacement of Sodium vapour lamps with LED lamps

Instrumentation: -

- Introduction of variable frequency drive for apron feeder of RDF feeding system.
- Modifications in logics to minimize the coal mill tripping's due to CO high while feeding RDF and AFR in kiln.
- UPS supply for BK590 communication modules in Pfister roto scale systems.
- Installation of Single-Phase Preventers in all AAQMS.
- Anti-collision device for Coal Stacker, Cement Plant Coal Reclaimer and CPP Coal Reclaimer.
- Installation new version of weather monitoring station.
- Bluetooth communication at coal stacker and reclaimer to integrate with plant DCS.
- Commissioning of in-house shredder system.

Mechanical:-

Following Modifications were done towards betterment of Environment & reducing power consumption.

- Replaced existing pump with high efficiency Pump for cooling towers.
- Replaced Mineral Oil with Synthetic Oil for Compressors.
- Replacement of reversible belt conveyor with Pneumatic diverting gate - Performance Enhancer/Gypsum.
- Replacement of reversible belt conveyor with Pneumatic diverting gate – Clinker.
- Replacement of reversible belt conveyor with Pneumatic diverting gate – Gypsum.
- Replacement of reversible belt conveyor with Pneumatic diverting gate - Performance Enhancer.

PART-H

Additional measures/investment proposal for energy conservation and better environment.

- Continuous efforts are always being made to maintain the environment clean and green by developing a Green Belt.
- Installation of WHRB to utilize Hot gases from Cooler & Preheater and produce Electricity of 14MW.
- Regularly we are monitoring ambient air quality, Noise level and stack along with water quality analysis.
- Constructing of internal good road inside the plant to reduce fugitive dust emission in Phase manner

- Scheduled maintenance and monitoring of all Air Pollution Control Device's (APCD'S) like Bag Filters and Bag House are being regularly undertaken to ensure their efficient operations in order to keep emissions level within the prescribed limit.
- Awareness programs like plantation activities, Slogan competition, drawing competition & Essay competition was organized for Employees & Families of Employees for awareness on environment protection on 5th June (World Environment Day) , Ozone day (16th Sep) & Earth day (22nd April)
- Actions are taken to utilize Hazardous wastes like Paint sludge, ETP Sludge & other alternate fuels like Carbon powder, tyre chips, plastic waste, agro waste, MSW waste, RDF etc. in Kiln.
- Green belt development and tree plantation is our on-going & continuous process. We are doing new plantation to increase the biodiversity of the area.
- Total plant area is 266 Ha out of which plantation has been done in 33% area which is 88 Ha. Presently **199772 plants have been** planted surrounding Boundary Zone, of the total plant & Mines area.
- An Electric Auto is being used for the collection of dry waste such as Plastic waste from the nearby localities like from street vendors, tea shops, shopping complex etc. for the purpose of Co-processing in Kiln. Thus, waste is collected & disposed of in a secure manner without causing pollution.

Proposed modifications for the year 2024-25 for Energy Conservation and Better Environment:

Process: -

- Optimization of Kiln Coal transportation phase density.
- Cement Mill-1 Fan Efficiency improvement from 76.3 % to 85.4 %.
- Cement Mill-2 Fan Efficiency improvement from 75.6 % to 85.4 %.
- Improvement of cooler ESP fan efficiency from 40.5% to 86.15% by replacing the new impeller.
- Replacement of all old and inefficient lighting system by Energy efficient Lighting system i.e., LED.
- Intelligent flow controller in compressed air system for pre Clinkerization.

Mechanical: -

Installation of Intelligent Flow controller at pre Clinkerisation compressed air system.

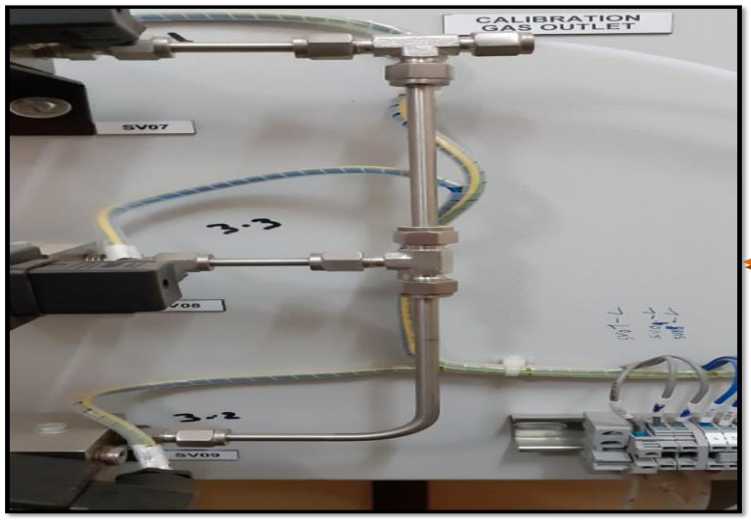
Instrumentation: -

- Upgradation of IPS (IGCT Power Supply) modules in Pre-Heater fan MV drive panel.
- Installation, commissioning and programming of solenoid operated butterfly valves for water spray systems at LS Crusher and LS transportation.

PART- I

Any other particular in respect of environmental protection and abatement of pollution

- Implementation of EMS including compliance of environmental laws through periodic Management Review & Internal/ external audits.
- Awareness promotion through various environmental competitions, workshops, presentations etc. on world environment day, Ozone Day & Earth Day.
- Improvement in Ambient Air Quality through effective control on fugitive dust emission.
- Extensive green belt surrounding the boundary & inside plant premises is being developed in a phase wise manner.
- Installation of Remote calibration facility for Gaseous parameter SO2 & NOx for stacks of CPP & Kiln.
- Retrofitted Emission Control Devices for all the DG sets for the reduction of Particulate matter emitted by in-use diesel operated generator sets.



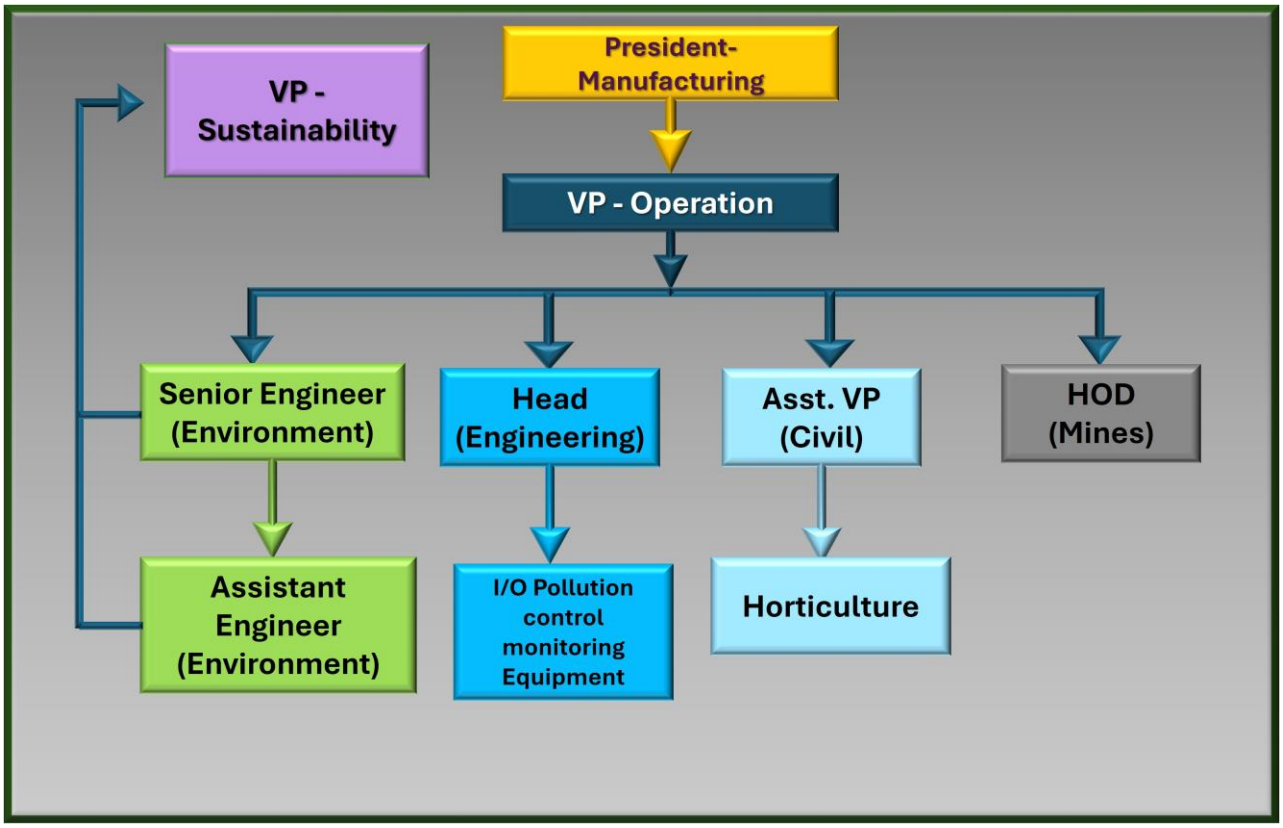
Remote calibration Setup

Continuous Ambient Air Quality Monitoring stations (04 No's Locations)

Installation of Continuous Stack emission monitoring stations for main stacks

Retrofitted Emission Control Devices for the DG sets

Details of Environmental Cell



Miscellaneous

World Environment Day 2023 Celebrations

World Environment Day 2023 was celebrated at M/s Orient Cement Ltd, Chittapur, on 22nd June 2023 @ 10:30 AM. This year theme for World Environment Day was: ***"BEAT PLASTIC POLLUTION"*** with a slogan ***"Invest in plants & enliven our future generations"*** for which Environment Department along with senior staff of Orient Cement Ltd commenced an opening program by planting the saplings by the chief guests **Mr. S. Madhusudhan-SEO, KSPCB, Kalaburagi, Mr. Adam Patel-AEO KSPCB Kalaburagi, Mr. Satyabrata Sharma - President-Manufacturing & Unit Head, Mr. Santosh Kumar Sharma - VP-Operation & other delegates** in the area opposite to Industrial canteen near main gate and at Labor colony & later mass plantation of 5000 plus saplings were carried out by individual department staff & Workmen.

From 25th May to 15th June -2023, OCL Chittapur has conducted an awareness program & Competitions such as Quiz competition, Essay Competitions, drawing competitions, Slogan competitions by involving school children's, technical staff, workmen's & labors.

The Welcome Note along with World Environment Day Speech was addressed by Mr. Murthy Raju Dandu from HR Department & then the Speech was addressed by Mr. S Madhusudhan-SEO KSPCB, Adam Patel – AEO KSPCB, our Unit Head Shri. Satyabrata Sharma in a thought-provoking manner, which set a perfect platform for our colleagues who have gathered for WED celebration.

The Chairpersons shared their thoughts on various recent aspects such as plastic pollution, Green belt development, Air pollution, AFR Utilization and different subjects of Environment. Also prize distribution program was carried out rewarding the winners, who have participated in the World Environment Day Events (Quiz, Essay, Slogans & drawing / painting) and concluded with Vote of Thanks by Mr. Ramesh Bashetty AM-Environment.

<u>Glimpses of World Environment Day-2023 celebrations at Orient Cement Ltd, Karnataka.</u>

Plantation by Mr. S Madhusudhan-SEO, KSPCB, Kalaburagi in the area opposite to Industrial canteen near main gate

Plantation by our Unit Head Mr. Satyabrata Sharma in the area opposite to Industrial canteen near main gate

Plantation by Mr. Santosh Kumar Sharma- VP-Operation in the area opposite to Industrial canteen near main gate

Group photo on WED-2023 in the area opposite to Industrial canteen near main gate

Mass Plantation carried out by our Staff in the area opposite to Industrial canteen near main gate

Mass Plantation carried out by Security team in the area opposite to Industrial canteen near main gate

Board showing different types of saplings planted in the area opposite to Industrial canteen near main gate

World Environment Day programme inauguration by Chief guests

Speech by Mr. S Madhusudhan-SEO, KSPCB, Kalaburgi

Speech by Mr. Adam Patel- A.E.O KSPCB, Kalaburgi

Speech by Our Unit Head Mr. Satyabrata Sharma

Prize distribution to winners by Mr. S Madhusudhan - SEO, KSPCB, Kalaburgi

Prize distribution to winners by Mr. Adam Patel-AEO, KSPCB, Kalaburagi

Prize distribution to winners by Mr. Satyabrata Sharma-Unit Head & Mr. Santosh Kumar Sharma- VP-Operation

Vote of Thanks by Mr. Ramesh Bashetty, Environment Department

World Environment Day -2023 Prize distribution programme to winners of competition in DAV Orient Gyan Mandir School

Prize distribution to DAV School Children by Mr. Santosh Kumar Sharma- VP-Operation and Mr. Pandurang Kulkarni- Principal DAV School

Prize distribution to DAV School Children by Mr. Santosh Kumar Sharma- VP-Operation and Mr. Ramesh Bashetty – Asst. Manager-Environment


Prize distribution to DAV School Staff by Mr. Santosh Kumar Sharma- VP-Operation


AMBIENT NOISE LEVEL (PLANT) [Leq Value in dB(A)] FY-2023-24

Particulars	Tolerance Limit dB(A) in day time	Actual Avg Values Max dB(A) Day Time
Near Power Plant	75	66.21
Near Coal Yard	75	63.73
Near Water Reservoir	75	63.74
Near Main Gate	75	67.69

Particular	Tolerance Limit dB(A) in Night time	Actual Avg Values Max dB(A) Night Time
Near Power Plant	70	63.83
Near Coal Yard	70	63.27
Near Water Reservoir	70	63.03
Near Main Gate	70	66.11

Details of Pollution Control Measures installed at various location

S. No.	Location of PCM	PCM
1	Lime stone crusher	Water Sprinkling at Hopper & Bag Filter
2	Additives crusher	Bag Filter
3	Coal crusher	Bag Filter
4	Raw Mill	Bag House
5	KILN	
6	Cooler	ESP
7	Coal Mill	Bag Filter
8	Cement Mill-1	Bag Filter
9	Cement Mill-2	
10	Captive Power Plant	ESP
11	Stacker	Water Sprinkling and Covered
12	Clinker Silo	Bag Filter
13	Fine Coal bin Silo	Bag Filter
14	Raw Meal Silo	Bag Filter
15	Cement Silo (4 no's)	Bag Filter
16	Fly ash Silo	Bag Filter
17	Packing House (5 no's of Packers)	Bag Filter
18	All transferring points of raw material handling and product.	Bag Filter
19	Sewage treatment plant for domestic sewage	Sewage treatment plant (500 KLD)
20	Green belt development in the premises	Green belt development

Statement Showing Power Consumption Plant for the Year April-2023 to Mar-2024

MONTH	POWER CONSUMPTION (KWh) KPTCL/CPP/ Renewable energy
Apr-23	9,006,202
May-23	13,966,952
June-23	14,861,941
July -23	10,825,762
Aug-23	12,706,196
Sept-23	12,585,847
Oct-23	10,926,441
Nov-23	10,823,918
Dec-23	13,547,513
Jan-24	13,822,031
Feb-24	14,425,763
Mar-24	13,465,808
TOTAL	**150,964,376**

Statement Showing Power Consumption Mines for the Year April-2023 to Mar-2024

MONTH	POWER CONSUMPTION ((KWh)) KPTCL/CPP/Renewable energy
Apr-23	137,785
May-23	379,684
June-23	405,424
July -23	278,318
Aug-23	326,871
Sept-23	303,598
Oct-23	257,971
Nov-23	248,747
Dec-23	365,718
Jan-24	358,136
Feb-24	388,296
Mar-24	351,186
TOTAL	**3,801,732**

Year wise plantation details carried at Orient Cement Ltd

The Details of Tree Plantation in Orient Cement Factory and Mines area from 2013-14 to 2023-2024 and Percentage of Survival

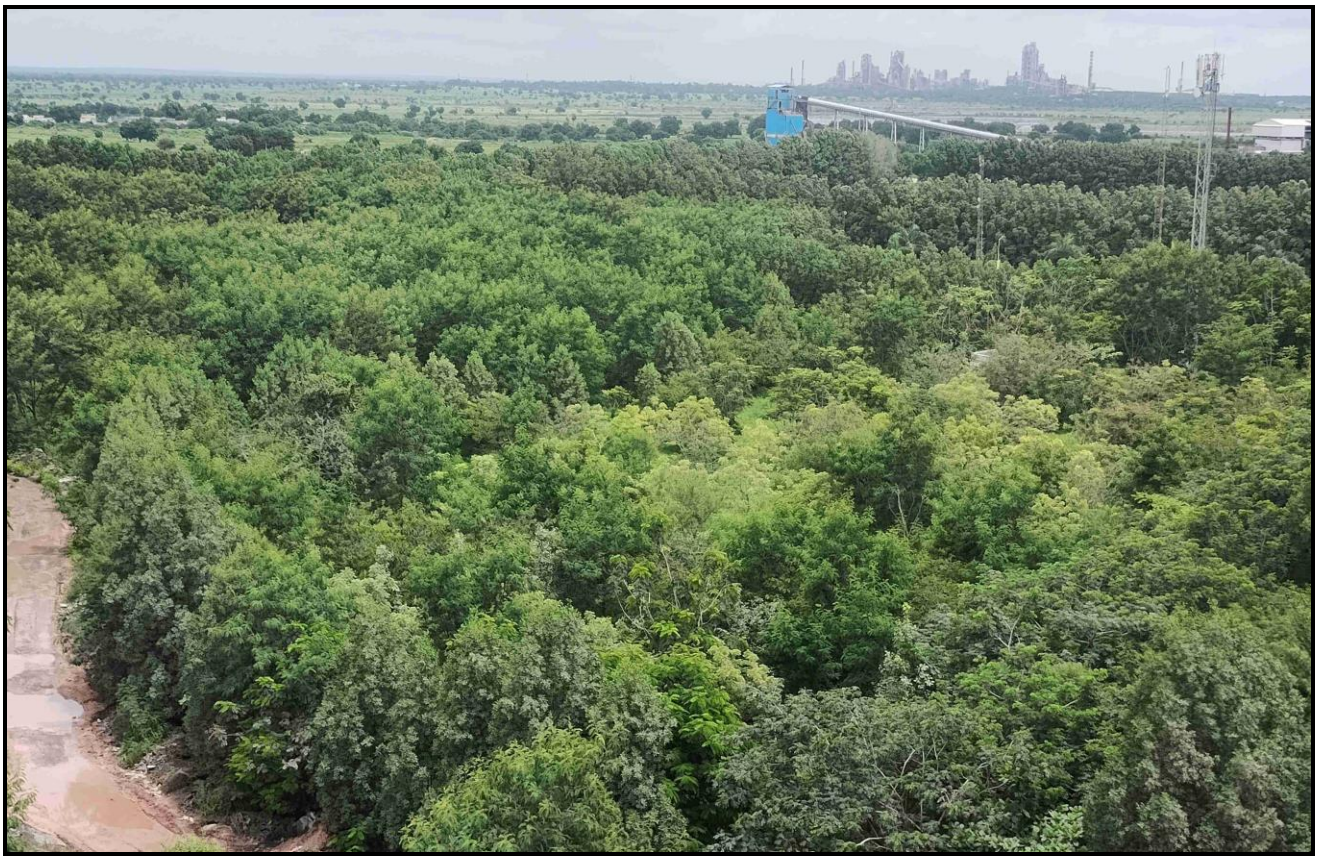
Year	Factory	Mines	Surrounding Plant Area (Labors colony, Staff Colony, Colony Roadside, School, Main Gate Front Area)	Total	Survival % Age	Survival
2013-14	25000	-	-	25000	50%	12500
2014-15	25000	-	-	25000	50%	12500
2015-16	30000	1220	-	31220	70%	21854
2016-17	49000	4780	-	53780	66%	35700
2017-18	21266	3159		24425	75%	18476
2018-19	13631	3963	15233	32827	80%	26261
2019-20	10799	4279	24446	39524	80%	31620
2020-21	4862	6726	13280	24868	72%	17905
2021-22	3258	3871	6875	14004	48%	6722
2022-23	774	2490	13436	16547	60%	9928
2023-24	16182	17480	3671	37333	42%	15680
Total:	199772	47815	76941	324528	64%	209146

Total plant area: 266 Ha.
Total GBD to be developed: 33%of plant area = 87.78 Ha.
Total area of Green Belt Development in factory & Colony: 88 Ha as on March 2024
Total area planned during FY-2023-24: 10Ha (Gap Filling of the existing plantation Area)

Types of Species planted:

Pongemia, Badam, Thaspesia, Sisha Piniya, Acacia, Neem, Tamarind, Honge trees, Eucalyptus, Ashok, Peeple tree, Hercules fermc, Gilmore tree, Subabul tree, Hatti tree, Conocarpus (Dubai Tree) Feltoform, Bamboo, matti, alstonia, keshiaseema, keshiya-java, mango, kaala jamun, alma, guava, caesalpinia, and Others.

Green Belt Development inside the plant premise



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Hero Electric Bike KA32 (CPP)	95,470.00	0.95
Hero Electric Bike KA32 (Electrical)	95,470.00	0.95
AFR-RDF Feeding System For PH Calciner	22,666,349.11	226.66

Fly Ash Rake Unloading System	215,814,297.24	2,158.14
Load Centre Fly Ash Rake Unloading System	36,152,813.43	361.53
Fly Ash Rake Unloading System Silo	52,080,198.82	520.80
Vane Anemometer -Da400	73,990.00	0.74
Weather Monitoring Station	152,400.00	1.52
Water Can Cleaning Machine	135,000.00	1.35
Spraying Machine Battery Operated Agri Mart	4,375.00	0.04
Piaggio Apee - FX Electric 3Wheeler	387,450.00	3.87
Retrofit Emission Control Device For 500 Kva Dg Se	2,652,575.00	26.53
Retrofit Emission Control Device For 600 Kva Dg Se	1,339,000.00	13.39
Hero Electric Bike - Ka33 Ed8656	120,000.00	1.20
Hero Electric Bike - Ka33 Ed8657	120,000.00	1.20
Hero Electric Bike - Ka33 Ed8655	120,000.00	1.20
Total	**212,82,59,824.79**	**21282.60**

CSR-R&R Activities carried out FY 2023-24

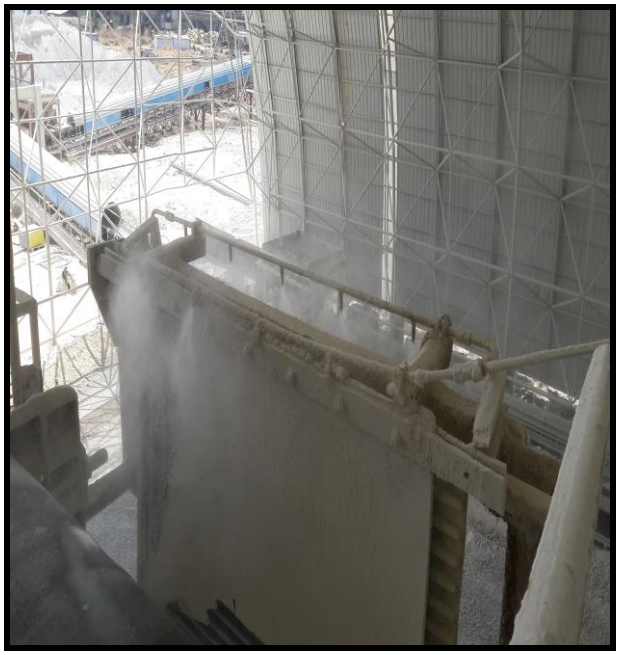
S. no.	Nature of expenses	Amount (Rs. In Lakh)
Q1	**April-2023 to June-2023**	
1	Infrastructure development in the villages.	116,69,671
2	Education	8,54,064
3	Hygiene and sanitation	2,60,536
4	Health	27,62,742
5	Heritage ,Culture etc. (Local folk art promotions etc.)	28,69,329
6	Programme administration monitoring and Evaluation	25,53,453
	Q1 Total	**2,09,69,795**
Q2	**July-2023 to September-2023**	
1	Infrastructure development in the villages.	2,441,618
2	Education	2,282,902
3	Health	4,913,095
4	Livelihood Promotion and Capability building	1,028,300
5	Programme administration monitoring and Evaluation	2,393,776
	Q2 Total	**13,059,691**
Q3	**October-2023 to December-2023**	
1	Infrastructure development in the villages.	33,29,331
2	Education	1,93,25,250
3	Hygiene and sanitation	6,14,800
4	Health	47,09,768
5	Livelihood Promotion and Capability building	9,048
6	Programme administration monitoring and Evaluation	25,44,180
	Q3 Total	**3,05,32,377**

Q4	January-2024 to March-2024	
1	Infrastructure development in the villages.	40,87,640
2	Education	4,11,82,458
3	Hygiene and sanitation	89,784
4	Health	32,10,231
5	Programme administration monitoring and Evaluation	24,93,978
	Q4 Total	**5,10,64,091**
	Total overall Expenses from Q1 to Q4	**11,56,25,954**

Initiatives on Environment

Rubber Curtains & Water sprinkling @ Limestone Hopper

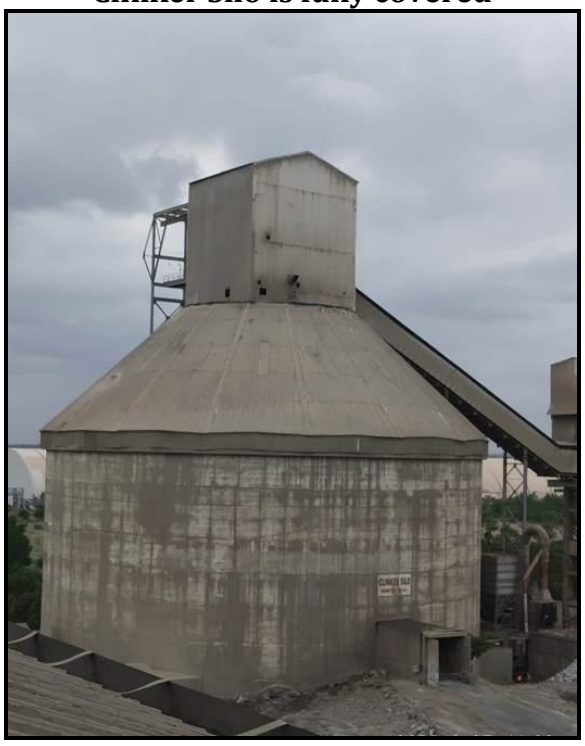
Fogging System on Belt Conveyors & Water Sprinkling (Fogging system) in Limestone Hopper



Concrete road inside the plant to avoid fugitive dust

Belt Conveyors are fully covered

Clinker Silo is fully covered



Covered Shed for Raw Material storage

Raw materials Storage Yards are covered

Bag House for Kiln & Raw mill

ESP for Cooler and CPP

Bag Filters at all transfer points

Water Storage Reservoir & Rainwater Harvesting

Water Sprinkling for Dust Suppression on Roads

WTP & STP

ENVIRONMENTAL STATEMENT REPORT

FOR

ITAGI MINES
(FORM-V)

[YEAR 2023 - 2024]

REPORT BY

(Orient Cement Ltd.)

Captive Limestone, Clinkerisation,
Cement Unit & Captive Power Plant

Itga (V), Chittapur (Tq)
Kalaburagi (Gulbarga) - 585211

ENVIRONMENTAL STATEMENT REPORT

(Form-V)

[Year 2023 - 2024]

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CONTENTS

Prologue

Orient Cement is a Green Field project by CK Birla Group and EHS policy reflects each & every section in the organization. Our main vision is to conserve the Environment through new technologies, new initiatives.

At National Level, great emphasis is being laid on maintaining environmental quality, particularly in the regions where large-scale developmental programs are being undertaken. Orient Cement has adopted corporate policy along with EHS policy, for conserving the Sustainable environment and its development.

Company aspires to exceed market expectations across all sustainability issues and go beyond legal compliance to proactively reduce our environmental impacts. Our goals are to reduce our overall carbon footprint by embedding Environmental controls and practices into the daily management of the firm and thereby encouraging positive behavior from our staff to achieve a greener culture.

In order to comply with Environmental Protection Act and Environmental Preservation and Sustainable Development, Orient Cement has prepared the Environmental Statement Report; this report is furnished in Form-V & along with the data for Environmental components like Air, Water, & Noise for the period of **April-2023 to March-2024**.

1.1 INTRODUCTION

Man is a part of nature, and not separate or independent; at the same time, man is unique in the influence he has over nature. Man derives all his food, clothing, shelter, and other amenities from nature. In that process, if he does not take care to protect and cherish nature, but decrease or destroys, he will find that his own life and that of his children is in jeopardy.

The environment, a word as it stands today is not simple; it is not a fashionable word, but has got established definitions incorporates limitless complexities, bear definite power to put everybody under a flood of worries and pushes us to plan for betterment with minimum problems. The environment is now catching for all, the industry, the government, the people. Hence, it is joint responsibility to protect, preserve the environment and avoid perishing natural treasures. At this critical junction of time and efforts, the Indian industry has fulfilled its commitment in maintaining the environmental integrity.

Orient Cement Limited considers itself responsible for Environment and Society. We are committed to emission reduction, climate protection, effective energy management, responsible use of resources and its conservation keeping in mind that "**Today's Need – Future of Our Children**".

The next few pages of this Environment Statement Report (ESR) of Orient Cement Limited is based on actual data and verified records, will present a picture of more optimism for environmental care than ever before.

Orient Cement Ltd: is situated at Itga Village, Chittapur Taluk, Gulbarga District: which is about 50 Km from Gulbarga. It started its commercial operation in the year 2015. Presently the factory is operating with one Kiln of capacity 6000 TPD & 50MW Power Plant. The Company is manufacturing Ordinary Portland Cement (OPC) & Pozzolana Portland Cement (PPC).

M/s Orient Cement Ltd is operating limestone mine at Itga (V), Chittapur Taluk and Gulbarga District as captive mines with limestone production of 3.0 million tonnes per Annum for their Cement manufacturing at factory, which is about 02 Km from Mines. The project site is located between latitude and longitude of the mine lease area 17^0 6' 34.87'' - 17^0 8' 13.86'' N and 77^0

7’ 35.65’’ - 77^0 9’ 35.41’’ E. This mine is being operated using a mechanized open cast method with heavy equipment like hydraulic excavators, dozers and dumpers.

The policy for the abatement of pollution by the government of India provides for submission of environment statement by all the industries. Environmental Statement is therefore an output of Environmental Audit.

So an effort has been made in this report to explain Environmental Statement for the **financial year 2023-2024 ended 31st March 2024** as per Government of India notification GSR 329 (E), dated 13th March 1992 and amendment to Environmental (Protection) Rules 1986 and subsequent amendment there on.

1.2 METHOD OF MINING:

We are operating mines in eco-friendly way for sustainable development of environment. The mines are operated by an open-cast mechanized method of working where deep hole drilling and blasting and deployment of HEMM are used.

Separate Benches are made in overburden & Limestone to avoid contamination. In limestone a further five benches formed based on grade/Quality of limestone. ROM quality is maintained with the help of online X-belt Gamma rays analyzer. All the stone mined is being utilized for cement manufacturing.

1.3 ENVIRONMENT MANAGEMENT:

Top soil management:

We are stacking topsoil of black cotton at designated places at stable ground so called BC soil dump. The reason for stacking is to preserve the topsoil for plantation and land fertilization for natural condition. BC soil dump is maintained in specified gradient manner. Some of the topsoil removed is used for plantation purpose in mines area and in our plant area.

AERIAL VIEW OF TOP SOIL DUMP

TOE WALL ALONG WITH GARLAND DRAIN AT BELOW THE TOPSOIL DUMP

GARLAND DRAIN ALONG THE TOPSOIL DUMP TOE WALL WITH RANDOM RUBBLE BARRIERS

CATCHMENT/GARLAND DRAINS IN MINES AREA

CATCHMENT/GARLAND DRAINS WITH RR DRY STONE BARRIERS

DESILTING WORK

AIR QUALITY MANAGEMENT:

- Wet drilling arrangement and dust extractor system provided in drilling machine.
- Bag filter is provided at crusher to collect dust.
- Conveyor belts are totally covered with metal hood.
- Water spray is being done in hopper & on conveyor belts.

WATER QUALITY MANAGEMENT:

We are using mines pit water for dust suppression and drilling operation along the mines working area and haulage roads involved in transportation of limestone to crusher. We also use the pit water for planation purpose. We engaged a water tanker for plantation and for dust suppression.

Monitoring Locations of Ground water Level:

Sl.No	Location Name	Water Level in (m-BGL)
1	Itga Village	**8.26**
2	Mogla Village	**8.04**
3	Diggaon Village	**13.54**
4	Chittapur Village	**8.43**

AFFORESTATION:

FY 2023-24 trees planted are 17,480. Types of species are Gulmohar, Filta pam, Acacia, Neem, tamarind, Ashok, People tree, Dubai Conocurpus (dubai Tree), Honge trees, Bougain villa, Badam, Thespesia populmea, Sankeswar, Peltoform, Neem, Nelli, Shubham trees, Alstonia scholaris, Pongamia pinnata.

Areas of trees planted are as follows

1. Magazine back side
2. Near canteen area
3. Itaga Village side
4. Gap Plantation near Viewpoint roadside

The Details of Tree Plantation in Orient Cement Factory and Mines area from 2013-14 to 2023-2024 and Percentage of Survival

Year	Factory	Mines	Surrounding Plant Area (Labors colony, Staff Colony, Colony Roadside, School, Main Gate Front Area)	Total	Survival % Age	Survival
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AFR-RDF Feeding System For PH Calciner	22,666,349.11	226.66
Fly Ash Rake Unloading System	215,814,297.24	2,158.14
Load Centre Fly Ash Rake Unloading System	36,152,813.43	361.53
Fly Ash Rake Unloading System Silo	52,080,198.82	520.80
Vane Anemometer -Da400	73,990.00	0.74
Weather Monitoring Station	152,400.00	1.52
Water Can Cleaning Machine	135,000.00	1.35
Spraying Machine Battery Operated Agri Mart	4,375.00	0.04
Piaggio Apee - FX Electric 3Wheeler	387,450.00	3.87
Retrofit Emission Control Device For 500 Kva Dg Se	2,652,575.00	26.53
Retrofit Emission Control Device For 600 Kva Dg Se	1,339,000.00	13.39
Hero Electric Bike - Ka33 Ed8656	120,000.00	1.20
Hero Electric Bike - Ka33 Ed8657	120,000.00	1.20
Hero Electric Bike - Ka33 Ed8655	120,000.00	1.20
Total	**212,82,59,824.79**	**21282.60**

CSR - R&R Activities carried out FY 2023-24

S. no.	Nature of expenses	Amount (Rs. In Lakh)
Q1	**April-2023 to June-2023**	
1	Infrastructure development in the villages.	116,69,671
2	Education	8,54,064
3	Hygiene and sanitation	2,60,536
4	Health	27,62,742
5	Heritage ,Culture etc. (Local folk art promotions etc.)	28,69,329
6	Programme administration monitoring and Evaluation	25,53,453

	Q1 Total	**2,09,69,795**
Q2	**July-2023 to September-2023**	
1	Infrastructure development in the villages.	2,441,618
2	Education	2,282,902
3	Health	4,913,095
4	Livelihood Promotion and Capability building	1,028,300
5	Programme administration monitoring and Evaluation	2,393,776
	Q2 Total	**13,059,691**
Q3	**October-2023 to December-2023**	
1	Infrastructure development in the villages.	33,29,331
2	Education	1,93,25,250
3	Hygiene and sanitation	6,14,800
4	Health	47,09,768
5	Livelihood Promotion and Capability building	9,048
6	Programme administration monitoring and Evaluation	25,44,180
	Q3 Total	**3,05,32,377**
Q4	**January-2024 to March-2024**	
1	Infrastructure development in the villages.	40,87,640
2	Education	4,11,82,458
3	Hygiene and sanitation	89,784
4	Health	32,10,231
5	Programme administration monitoring and Evaluation	24,93,978
	Q4 Total	**5,10,64,091**
	Total overall Expenses from Q1 to Q4	**11,56,25,954**

PLANTATION ON VIRGIN AREA AFTER SPREAD THE B.C SOIL

PLANTATION ALONG THE SERVICE ROAD & HAUL ROADS

PLANTATION INFRONT OF MINES-OFFICE

FENCING OF AFFORESTATION AREA & AGRO FORESTRY

FENCING OF AFFORESTATION AREA & AGRO FORESTRY

STONE PITCHING ALONG THE NALA BANKS

STONE PITCHING BELOW THE TOPSOIL DUMP

DISPLAY OF COMMITY MEMBERS

PLANTATION ALONG THE SERVICE ROAD & HAUL ROADS

7.5 m SAFETY BARRIER PLANTATION

RAINWATER HARVESTING PIT cum SETTLING TANK

Year wise plantation at Mines

SL No	Financial Year	Location	Area in Ha.	Number of trees Planted	No. of plants survived	Survival (%)	Types of Species
1	2015-16	Reclaimed Black cotton dump area and Behind Mines Office	1.3	1220	610	50%	Acacia, Neem, tamarind, Ashok, People tree, Conocarpus (dubai Tree), Honge trees.
2	2016-17	Safety zones, Magazine Roads, Mineral stock area and Along the nala banks	2.35	4780	2390	50%	Acacia, Neem, tamarind, Ashok, People tree, Conocarpus (dubai Tree), Honge trees.
3	2017-18	Safety zones, Behind office & Garage and near view point	2.13	3159	2527	80%	Acacia, Conocarpus, Bougain villa, Badam, Honge, Tapsi, Sankeswar, Peltoform, Neem, Nelli, Shubham trees
4	2018-19	Avenue plantation(near nala), 7.5 m safety zone, Behind ANFO mixing shed & Near New rest shelter (WLA)	4.3	3963	3646	92%	Acacia, Conocarpus, Bougain villa, Badam, Honge, Tapsi, Sankeswar, Peltoform, Neem, Nelli, Shubham trees
5	2019-20	Nala & Buffer Safety zone and office surround area	3.33	4279	3829	89%	Conocarpus, Badam, Honge
6	2020-21	7.5m Safety zone, Village safety zone and Gap plantation	1.8	6726	6480	96%	Accasia, Conacorpous, Bougain villa, Badam, Honge, Tapsi, Sankeswar, Peltoform, Neem, Nelli, Shubham trees
7	2021-22	Limestone Crusher Area, Green belt, Gap plantation at Back side of HSD pump house and itaga village 500m safety zone.	1.55	3871	3290	85%	Mahagani, Terminia Catappa(Badam), Cassia Simma, Azadirachta Indica(Neem), Ficus religiosa(Peepal tree), Conacorpous, bougainvillea, and Delonix regia(Gulmohar).

8	2022-23	1. Plantation near BP-J MLB pillar 2. Gap plantation near Itaga village side, back side of AN building and near viewpoint area (Green belt)	1.27	2337	1781	85%	Azadirachta Indica(Neem), Conacorpus, Big neem, Delonix regia(Gulmohar) , Cassiya, Cassia siamea, Bougainvillea, Accasia and Terminia Catappa(Badam).
9	2023-24	1. Magazine back side, Near canteen area,Itaga Villagae side) 2. Gap Plantation near View point road side , ANFO bulding back side and Itaga village backside. 3. Outside of lease - Infront of canteen	3.81	17480	13984	90%	Acacia, Neem, tamarind, Ashok, People tree, Big neem,Catappa(Badam), Cassia siamea, Delonix regia(Gulmohar Conacorpus) , Custard Apple,Bamboo.
Total			**21.84**	**47815**	**37438**	**78%**	

Total area: 519 Ha
Active Mining Area: 45.91 Ha

Environmental Monitoring details as under:

Monitoring is carried out by M/S Cosmo Conscious Research laboratory, Bellary in all four seasons. The details are as under.

S.No	Environmental parameters	Parameters
1	Ambient Air Quality	Ambient air quality is being monitored continuously season wise as per IBM circular 3/92 & NAAQ notification 2009.
2	Noise	Season wise noise measurement study is carried out within the mining lease area. Personal protective devices were provided to workers to reduce the

		impact of noise.
3	Ground vibration	Ground vibration study is carried out by the company and every blast is monitored by "Seismograph". It is observed that all the readings are less than acceptable level.
4	Water	Water quality within the mine pit is monitored on regular basis. IS – 10500-2012 Drinking water standards, GSR 422 (E) General Standards for discharge of Effluent.

a) Stack monitoring report is as below.

S.NO.	POLLUTANTS (Particulate matter)	Avg. Quantity of Flow discharged (Nm^3/H)	Avg. concentrations of pollutants in discharge (mg/Nm^3)	Tolerance Limit (mg/Nm^3)
01	**New Crusher stack**	**39649.48**	**5.54**	**30**

b) Measures Taken to Control Noise: -

- Seismograph is used to get details of vibration and Noise pre blasting.
- Control blasting technique adopted by using NONEL.
- Schedule and Preventive maintenance of HEMM.
- Centralized lubrication system in Drilling Equipment.
- Noise mapping is done regularly in all mining operation area.

AMBIENT NOISE LEVEL (MINES) [Leq Value in dB(A)] FY-2023-24

Particular	Tolerance Limit dB(A) in day time	Average Actual Values in dB(A)
Crushing & Screening	**75**	**62.73**
Mining Area	**75**	**62.90**
Haulage / Office	**75**	**55.78**
Surge bin hopper	**75**	**55.48**

Particular	Tolerance Limit dB(A) in Night time	Average Actual Values in dB(A)
Crushing & Screening	**70**	**60.05**
Mining Area	**70**	**60.17**
Haulage / Office	**70**	**51.21**
Surge bin hopper	**70**	**50.80**

c) Measures taken for Ground Vibration Control:

- Seismograph is used to get details of vibration, Noise & fly rock pre blasting. Blasting pattern is modified if parameters are high.
- Down the Hole initiation is performed by shock tubes NONEL to reduce the noise and ground vibration.
- Optimum Charge per delay is maintained as per the recommendation given by DGMS.
- Blasting operation is carried out under supervision of qualified and experienced team.

ENVIRONMENTAL STATEMENT REPORT

[FORM-V]
(See rule 14)

PART-A

Name and address of the owner/ Occupier of the industry	: Satyabrata Sharma President – Manufacturing & Unit Head Itga (V), Chittapur (Tq) Gulbarga - 585211
Operation process	: Production of Cement
i. Industry category: Primary-(STC code) Secondary-(STC code)	: Red category
ii. Production category-units	: 2.1125 MTPA (for Clinker Production) 3 MTPA (for Cement Production)
a. Installed Capacity	: 3.6 MTPA (Limestone)
b. Consented Capacity	: 3 MTPA (Limestone)
iii. Year of establishment	: 2015 (ML-2681)
iv. Date of last environmental statement submitted	: **05/08/2023 for the year (2022-2023)**

Postal Address

1) Registered Office	: Orient Cement Ltd. 5-9-22/57/D G.P Birla Center, 2nd & 3rd floor, Adarsh Nagar, Hyderabad- 500063 Telangana
2) Factory	: Orient Cement Ltd. Itga (V), Chittapur (Tq) Kalaburagi - 585211 Phone: 08474-236716 Fax: 08474-23671

PART-B

Water and Raw Material Consumption

Particulars	During Previous Financial Year (2022-2023)	During Current Financial Year (2023-2024)
	(m^3/day)	(m^3/day)
Process/Dust suppression	44.89	44.67
Domestic/Gardening/Dust Suppression	3.65	3.59

Name of products	Process water consumption per unit of products output	
	During the previous financial year (2022-2023)	During the current financial year (2023-2024)
	(m^3/MT of Limestone)	(m^3/MT of Limestone)
Limestone	0.00572	0.00571

(ii) Raw material consumption

Name of raw materials	Name of products	Consumption of raw material per unit of (Clinker) output	
		During the previous financial year (2022-2023)	During the current financial year (2023-2024)
Limestone	Limestone	1.387	1.350

PART-C

Pollution discharged to environment/unit of output (Parameters as specified in the consent issued)

S.NO	Pollutants	Quantity of pollutants discharged. (Mass/day))	Concentration of pollutants in discharge (Mass/Volume)	Percentage of variation from prescribed standards with reasons
a) WATER: -				
a.	Effluent treatment plant	Nil	----	No wastewater generation in Mines
b) AMBIENT AIR: -				
a.	Mining Area	**PM10 & PM2.5**	55 µg/m³ 18 µg/m³	Within Standards
b.	Haulage		54 µg/m³ 17 µg/m³	Within Standards
c.	Crushing & Screening		55 µg/m³ 18 µg/m³	Within Standards
d.	Surge bin hopper		56 µg/m³ 19 µg/m³	Within Standards

*** The value represents arithmetic average of 12 months for the financial year 2023-24**

Ambient Air Quality Report in µg/m³ Mines FY 2023-24

Ambient Air Quality Report in µg/m³ Mines FY 2023-24														
Mining Area		Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Average
	PM 10	52	52	54	55	54	53	53	52	53	53	54	73	55
	PM 2.5	16	16	17	16	17	16	16	16	17	19	19	35	18
	SO2	16	18	17	17	16	16	15	15	15	17	18	18	17
	NOx	17	18	16	17	19	15	21	16	16	23	24	29	19
	CO	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Haulage														
	PM 10	53	55	53	54	54	55	53	51	52	52	53	68	54
	PM 2.5	16	15	15	16	16	16	15	16	14	20	20	30	17
	SO2	17	19	16	17	16	16	14	14	15	17	19	20	17
	NOx	16	18	17	18	18	17	20	15	15	23	24	29	19
	CO	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Crushing & Screening														
	PM 10	53	51	54	54	54	55	53	49	53	57	58	70	55
	PM 2.5	16	15	15	16	15	14	14	16	16	20	21	34	18
	SO2	16	18	17	17	16	16	14	15	15	13	13	12	15
	NOx	17	18	16	18	19	16	21	15	15	21	20	23	18
	CO	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Labor Colony/Near Surgebin														
	PM 10	54	53	52	53	53	56	55	53	54	61	61	71	56
	PM 2.5	17	17	16	16	17	16	18	13	16	22	24	31	19
	SO2	17	19	16	16	15	15	14	14	15	17	19	18	16
	NOx	17	19	16	17	18	16	20	14	15	24	24	29	19
	CO	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Mines Pit Water Quality Monitoring Data FY 2023-24

Mines Pit Water														
Parametrs	Unit	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Avg
Colour	Hazen units	17	14	12	<1	<1	2	<1	2	1	<1	<1	<1	8.00
conductivity	ms/cms	552	532	543	455	498	337	657	690	702	648	718	708	586.67
Total dissolved Solids	mg/l	384	371	378	319	342	236	458	1520	488	388	431	425	478.33
pH	-	8.21	8.13	8.28	8.22	8.21	8.01	7.16	7.88	7.24	8.2	8.3	8.6	8.04
Turbidity	NTU	1.2	1.3	0.3	0.9	0.7	4.7	0.4	1.2	0.5	1.2	0.9	0.5	1.15
Total Suspended Solids	mg/l	14	15	2	10	12	3	2	3	3	2	1	<1.0	6.09
Calcium as Ca	mg/l	52.91	58.52	41.68	92.98	41.68	45.69	68.13	7.21	68.13	57	34	36	50.33
Magnesium as Mg	mg/l	23.77	12.11	15.52	8.21	22.81	10.18	33.97	92.28	27.65	29	28	26	27.46
Total Hardness as	mg/l	230	196	168	266	198	156	310	398	284	263	200	198	238.92
Chlorides as Cl	mg/l	67.48	49.98	57.48	67.48	39.99	34.99	11.49	16.99	21.99	41	32	31	39.32
Sulphates as SO4	mg/l	33.65	28.43	39.62	33.69	32.95	28.9	18.09	20.02	46.06	43	47.00	54	35.45
Flourides as F	mg/l	1.73	1.4	1.81	1.48	1.84	1.5	1.73	1.01	1.8	1.22	1.32	0.9	1.48
Nitrate Nitrogen As	mg/l	9.5	9.1	10.59	2.79	1.85	2.71	6.35	4.78	6.78	35.5	39	25.1	12.84
Total Alkalinity as	mg/l	100	225	190	190	1.55	160	280	285	320	284	208	194	203.13
Total Iron as Fe	mg/l	0.526	0.606	BDL	BDL	0.303	BDL	0.119	BDL	0.01	0.09	0.16	<0.05	0.26
Total Coliform Count	MPN/100ml	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
Escherichia Coli Count	MPN/100ml	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent

PART-D

Hazardous Wastes

[As specified under Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2016]

Hazardous Wastes		Total Quantity	
		During the Previous Financial year (2022-2023)	During the Current Financial year (2023-2024)
(a) From Process	(a) Spent/ Used Oil (Category 5.1)	2.26 MT	9.90 MT
	(b) Empty Barrels (Category 33.1)	48.24 MT	26.24 MT
(b) From Pollution control Facilities	N.A.	N.A.	N.A.

However, this waste is being generated from industrial related activity i.e. hydraulic movement of machines, oiling/ greasing etc. which will be sold to registered recycler.

PART-E
Solid Wastes

	Total Quantity (Overburden) in tones	
	During the previous financial year (2022-23)	**During the current financial year (2023-2024)**
(a) From process	94713 MT (Over burden)	133101 MT (Over burden)
(b) From pollution control facility	100% recycled in to process	100% recycled in to process
(c) Quantity recycled or re-utilized	100% recycled in to process	100% recycled in to process

PART-F
Please specify the characteristics (in terms of composition of quantum) of Hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

Hazardous waste:

- No hazardous waste generated from the mining activities.
- Limestone Crusher Gear box oil will be stored and disposed for authorized person.

Solid waste:

- Generated and disposed during 2023-24: 1,33,101 MT of over burden is used for making bunds and for green belt development.

PART-G
Impact of pollution abatement measures taken on conservation of natural resources and on the cost of production.

- 0.71 ha of Overburden soil dump area has been reclaimed and rehabilitated by plantation.
- Total 47,815 saplings have been planted in 21.84 ha area till March 2024 and 17,480 saplings have been planted during 2023-24 near Magazine back side, Near canteen area, Itaga Villagae side, Gap Plantation near View point road side , ANFO bulding back side and Itaga village backside and Outside of lease - Infront of canteen.
- Constructed Embankment and garland drain around the pit about 285m to avoid surface water into mines.
- Around 9700 sqm of Stone pitching has been made along the slopes of nala stream both sides.
- Automatic water sprinklers have been installed on main haul road to reduce dust Emission.
- Crushed limestones are being conveyed to plant by fully covered belt conveyor to avoid spillage and air borne dust.
- Water sprinkling system is provided at crushing operation and transfer points of belt conveyer for controlling fugitive emissions.

BC Soil Dump with Protection Wall

Garland Drain along the Dump Toe Wall with Random Rubble Barriers

Garland drain with RR barrier

Stone Pitching along Nala Banks

Haul Road Dust Suppression

Water sprinkler along the Haulage road

Closed Belt Conveyor

Rubber curtains & Water sprinkler system provided at Limestone dump hopper to Control dust at Lime stone Crusher

Wet drilling

Water sprinkling on drill hole face before blasting and water sprinkling for dust suppression on blasted muck pile

Desilting Work

Modifications for the year 2023-24 for energy conservation and better Environment:

Energy Conservation:

- Use of artificial intelligence and digital technologies to improve the performance of the crusher by auto control of limestone feed based on secondary crusher load. This helps in maintain stable load at optimum power eliminating equipment damages due to overload.

Better Environment:

ECO-FRIENDLY GEO TEXTILE COIR MATT FOR SLOPE PROTECTION

RAINWATER HARVESTING PIT cum SETTLING TANK

- A total of 2,57,47,523 kWh of renewable energy was generated through WHRS for plant and mine utilization
- Constructed Embankment and garland drain around the pit to avoid surface water into mines area.
- Topsoil spread in the Gap plantation area for soil restoration within the mining lease boundary
- 17480 no's of saplings are planted in the year 2023-24 covering an area of 3.83 ha.
- Constructed an RR dry stone toe wall for a length of 415 meters below the new overburden dump (OD-5).
- Fencing was erected around the mine working pit to prevent unauthorized entry into the mine.
- A separate MS pipeline was installed to direct rainwater to the harvesting pit for recharging groundwater throughout all seasons.
- A hydrogeological study was conducted in 2023-24 to determine the depth of the groundwater table, and the mining operation has been planned accordingly.
- Existing plantation maintenance (plantation, maintenance, and Fencing) cost Rs. 34,96,000.00/-
- Construction of earthen garland drain for a length of 1595 m around the proposed working pit to avoid surface water in to mines area cost Rs. 54300.00/-
- Desilting of Check Dam, Nala & Rainwater Harvesting pit cost Rs. 81450.00/-

Catchment Drains with RR Dry Stone Barriers

PART-H

Additional measures/investment proposal for environmental protection including abatement of pollution, prevention of pollution.

1. Total 47,815 saplings have been planted in 21.84 ha area till March 2024 and 17,480 saplings have been planted during 2023-24 near Magazine back side, Near canteen area, Itaga Villagae side, Gap Plantation near View point road side , ANFO building back side and Itaga village backside and Outside of lease - Infront of canteen.
2. Total 370 m of Toe wall at below the top soil dump has been constructed and garland drain along the dump toe wall with 36 no's of random rubble type barriers is made to arrest the silt.
3. Pressurized water sprinkler is fitted on water tanker for spraying on blasted material to avoid dust during loading.
4. Rainwater harvesting pit with size 50m X 40m with depth 2m has been constructed near south side of the mine lease boundary for ground water recharge.
5. Total 2.5KV solar panel has been installed in various locations as alternative power sources for lighting and other applications.
6. Desilting of garland drain, nala, ponds.

7. 5m height earthen bund for a length of about 250 m has been formed along the village and Mining lease boundary.
8. Personal dust monitoring will be done to workmen in every quarterly.
9. Around 9700sq.m of area stone pitching has been done at both sides of nala bank to avoid soil erosion.
10. A total of 2,26,19,400 kWh of green energy (wind and solar) was purchased for plant and mine utilization in 2023-24.

- **EXPENDITURE ON ENVIRONMENT MANAGEMENT**

DETAILS OF EPM EXPENDITURE

ASSET DESCRIPTION	Amount	Amount in Lakhs
DUST SUPRESSION SYSTEM	43,58,474	43.58
BAG FILTER & ESP FOR STACKS	33,54,39,089	3,354.39
CPP - RCC CHIMNEY	2,87,14,293	287.14
WATER RESERVOIR	25,87,57,199	2,587.57
WATER TREATMENT PLANT	12,85,41,299	1,285.41
SEWAGE TREATMENT PLANT	7,28,00,825	728.01
ROAD & DRAIN	50,14,63,605	5,014.64
GREEN BELT DEVELOPMENT	53,48,720	53.49
FLY ASH SILO & HANDLING SYSTEM	12,89,16,613	1,289.17
EFFLUENT TREATMENT PLANT & DM PLANT IN CPP	3,60,66,506	360.67
CPP - ELECTROSTATIC PRECIPITATOR	10,77,18,110	1,077.18
CPP ASH HANDLING SYSTEM	3,98,25,799	398.26
COMPLETE BURNER ASSEMBLY	1,17,15,390	117.15
AMBIENT AIR QUALITY MONITORING	2,20,13,783	220.14
SNCR FOR NOX REDUCTION	3,03,21,259	303.21
AMMONIA SLIP SENSOR STACK APPLICATION	17,80,000	17.80
MEDIA CONVERT - LIQUID AFR SYSTEM	2,54,471	2.54
NEUTRON SURVEY METER	4,25,000	4.25
UT PUMP	13,03,410	13.03
WASTE SEGREGATION YARD	4,55,406	4.55
SHREDDER FOR AGRO WASTE AFR	3,47,913	3.48
BUCKET ELEV,FEEDING ARRG & SHED FOR AGRO	18,89,931	18.90
RAIN WATER HARVESTING	12,03,438	12.03
COLONY LADIES TOILETS	2,12,400	2.12
TRUCK PARKING YARD	5,60,08,531	560.09
SUBMERSIBLE PUMP 100HP/750KW	17,52,250	17.52
HERO ECO FRIENDLY ELECTRIC BIKE	89,890	0.90
CHEMICAL STORAGE ROOM - CPP	8,94,521.40	8.95
LADIES TOILETS STORES	2,49,034	2.49
LADIES TOILETS CPP	2,49,035	2.49

BUND OF 5MTR HIGHT MINES BOUNDRY	6,66,580	6.67
ELECTRIC BIKE-KA32 HB1976 (IT DEPT)	83,190	0.83
Covering Shed Rice Husk- Plastic Waste Phase - I	16,442,266.59	164.42
Toilets Construction @ Worker Colony	1,810,434.59	18.1
Hero Electric Bike KA32 HC3758 (QC)	95,470.00	0.95
Hero Electric Bike KA32 HC3755 (Dispatch)	95,470.00	0.95
Hero Electric Bike KA32 (CPP)	95,470.00	0.95
Hero Electric Bike KA32 (Electrical)	95,470.00	0.95
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Hero Electric Bike - Ka33 Ed8657	120,000.00	1.20
Hero Electric Bike - Ka33 Ed8655	120,000.00	1.20
Total	**2,128,259,824.79**	**21,282.60**

Details of Expenses (in Rs) made towards Environment Protection in Mines for the year 2023-24

Sl no.	Particulars	2023-24
1	Expenses for B C Soil Handling & Use for Afforestation	66,17,620.00
2	Expenses for Afforestation(plantation17480 No's, maintenance and Fencing 1167 m)	40,48,100.00
3	Expenses for laying a new pipeline to divert pit water to the rainwater harvesting pit	17,00,000.00
4	Expenses for construction of earthen garland drain around the proposed working pit (1.6 km length)	54,300.00
5	Expenses for Desilting of Check Dam, Nala & Rainwater Harvesting pit	81,450.00
6	Expenses for Dust Suppression operation & maint., cost of Water Tanker	15,72,000.00
7	Expenses for operation & maint., cost of permanent water sprinkler in Haul road, view Point and 3no's floating arrangement for pumps in mine pit (procurement of steel for floating pump and pipes for permanent water sprinklers)	2,00,000.00
8	Expenses for Use of NONEL, Electronic Detonators, Wooden Spacers and Stem Plugs.	17,86,200.00

9	Expenses for Environmental Monitoring Expenses + Airborne dust survey for workmen	11,73,500.00
10	Expenses for Ear Plugs & Ear Muffs	50,000.00
11	Expenses for Slope stability study & Hydrogeological study	1,20,000.00
		1,84,03,170.00
	Rs in Lakhs	184.0317

Proposed modifications for the year 2024-25 for Energy Conservation and Better Environment:

- 15000 no's of sapling are proposed to plant in the Green Belt area and village safety zones, Nala safety zone.
- Catchment/Garland drains for a length of 1000 m of appropriate size and gradient proposed at below the overburden dump to prevent run off water and desilted at regular intervals.
- Construction of Embankment and garland drain around the pit to avoid surface water into mines area.
- Proposed to carry the desilting work in the seasonal nala -1.

PART- I

Any other particular in respect of environmental protection and abatement of pollution

- Promoting Eco Friendly zero waste mining.
- Implementation of EMS including compliance of environmental laws through periodic Management Review & Internal/ external audits.
- Awareness promotion through various environmental competitions, workshops, presentations etc. on world environment day.
- Improvement in Ambient Air Quality through effective control on fugitive dust emission.
- Extensive green belt is being developed in the mining area with plantation of tree saplings surrounding mining lease area.

Arrangement of Solar light Panels in required areas

MISCELLANEOUS

World Environment Day 2023 Celebrations

World Environment Day 2023 was celebrated at M/s Orient Cement Ltd, Chittapur, on 22nd June 2023 @ 10:30 AM. This year theme for World Environment Day was: ***"BEAT PLASTIC POLLUTION"*** with a slogan ***"Invest in plants & enliven our future generations"*** for which Environment Department along with senior staff of Orient Cement Ltd commenced an opening program by planting the saplings by the chief guests **Mr. S. Madhusudhan-SEO, KSPCB, Kalaburagi, Mr. Adam Patel-AEO KSPCB Kalaburagi, Mr. Satyabrata Sharma - President-Manufacturing & Unit Head, Mr. Santosh Kumar Sharma - VP-Operation & other delegates** in the area opposite to Industrial canteen near main gate and at Labor colony & later mass plantation of 5000 plus saplings were carried out by individual department staff & Workmen.

From 25th May to 15th June -2023, OCL Chittapur has conducted an awareness program & Competitions such as Quiz competition, Essay Competitions, drawing competitions, Slogan competitions by involving school children's, technical staff, workmen's & labors.

The Welcome Note along with World Environment Day Speech was addressed by Mr. Murthy Raju Dandu from HR Department & then the Speech was addressed by Mr. S Madhusudhan-SEO KSPCB, Adam Patel – AEO KSPCB, our Unit Head Shri. Satyabrata Sharma in a thought-provoking manner, which set a perfect platform for our colleagues who have gathered for WED celebration.

The Chairpersons shared their thoughts on various recent aspects such as plastic pollution, Green belt development, Air pollution, AFR Utilization and different subjects of Environment. Also prize distribution program was carried out rewarding the winners, who have participated in the World Environment Day Events (Quiz, Essay, Slogans & drawing / painting) and concluded with Vote of Thanks by Mr. Ramesh Bashetty AM-Environment.

Glimpses of World Environment Day-2023 celebrations at Orient Cement Ltd, Karnataka.

Plantation by Mr. S Madhusudhan-SEO, KSPCB, Kalaburagi in the area opposite to Industrial canteen near main gate

Plantation by our Unit Head Mr. Satyabrata Sharma in the area opposite to Industrial canteen near main gate

Plantation by Mr. Santosh Kumar Sharma- VP-Operation in the area opposite to Industrial canteen near main gate

Group photo on WED-2023 in the area opposite to Industrial canteen near main gate

Mass Plantation carried out by our Staff in the area opposite to Industrial canteen near main gate

Mass Plantation carried out by Security team in the area opposite to Industrial canteen near main gate

Board showing different types of saplings planted in the area opposite to Industrial canteen near main gate

World Environment Day programme inauguration by Chief guests

Speech by Mr. S Madhusudhan-SEO, KSPCB, Kalaburgi

Speech by Mr. Adam Patel- A.E.O KSPCB, Kalaburgi

Speech by Our Unit Head Mr. Satyabrata Sharma

Prize distribution to winners by Mr. S Madhusudhan - SEO, KSPCB, Kalaburgi

Prize distribution to winners by Mr. Adam Patel-AEO, KSPCB, Kalaburagi

Prize distribution to winners by Mr. Satyabrata Sharma-Unit Head & Mr. Santosh Kumar Sharma- VP-Operation

Vote of Thanks by Mr. Ramesh Bashetty, Environment Department

World Environment Day -2023 Prize distribution programme to winners of competition in DAV Orient Gyan Mandir School

Prize distribution to DAV School Children by Mr. Santosh Kumar Sharma- VP-Operation and Mr. Pandurang Kulkarni- Principal DAV School

Prize distribution to DAV School Children by Mr. Santosh Kumar Sharma- VP-Operation and Mr. Ramesh Bashetty – Asst. Manager-Environment

Prize distribution to DAV School Staff by Mr. Santosh Kumar Sharma- VP-Operation

Glimpses of Social Activities organised by Orient Cement Ltd, Karnataka

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REHABILITATION & RESETTLEMENT ACTIVITIES

ORIENT CEMENT LTD., CHITTAPUR

CONDUCTED REHABILITATION & RESETTLEMENT (R & R) PROGRAMS FOR THE PERIOD FROM APRIL 2023 TO MARCH 2024

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Renovation and Beautification of Ancient Temple Shree Shambulingeshwar and Ratha (Chariot) at Diggaon Village with Total budget cost of Rs.69 Laksh executed under our R&R Activities

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RENOVATON & BEAUTIFICATION OF ANCIENT TEMPLE SHREE SHAMBULINGEHWAR TEMPLE AND RATHA (CHARIOT) UNDER R&R ACTIVITIES

Our Company has taken initiation for Renovation & Beautification of Ancient Temple Shree Shabmulingeshwara and Rata (Chariot) under our R&R activities and completed the entrie work of temple as per the villagers & temple committee salinification Villagers –Panchayath President –Vice President are very happy and expressed their gratitude towards Orient Cement Company for making the temple renovation work and its beautification very attractive-way. The villagers and temple committee are celebrated the Jatra in a grand-scale in view of the beautification & renovation works made to the temple and Rata

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RENOVATON & BEAUTIFICATION OF ANCIENT TEMPLE SHREE SHAMBULINGEHWAR TEMPLE AND RATHA (CHARIOT) UNDER R&R ACTIVITIES

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RENOVATON & BEAUTIFICATION OF ANCIENT TEMPLE SHREE SHAMBULINGEHWAR TEMPLE AND RATHA (CHARIOT) UNDER R&R ACTIVITIES

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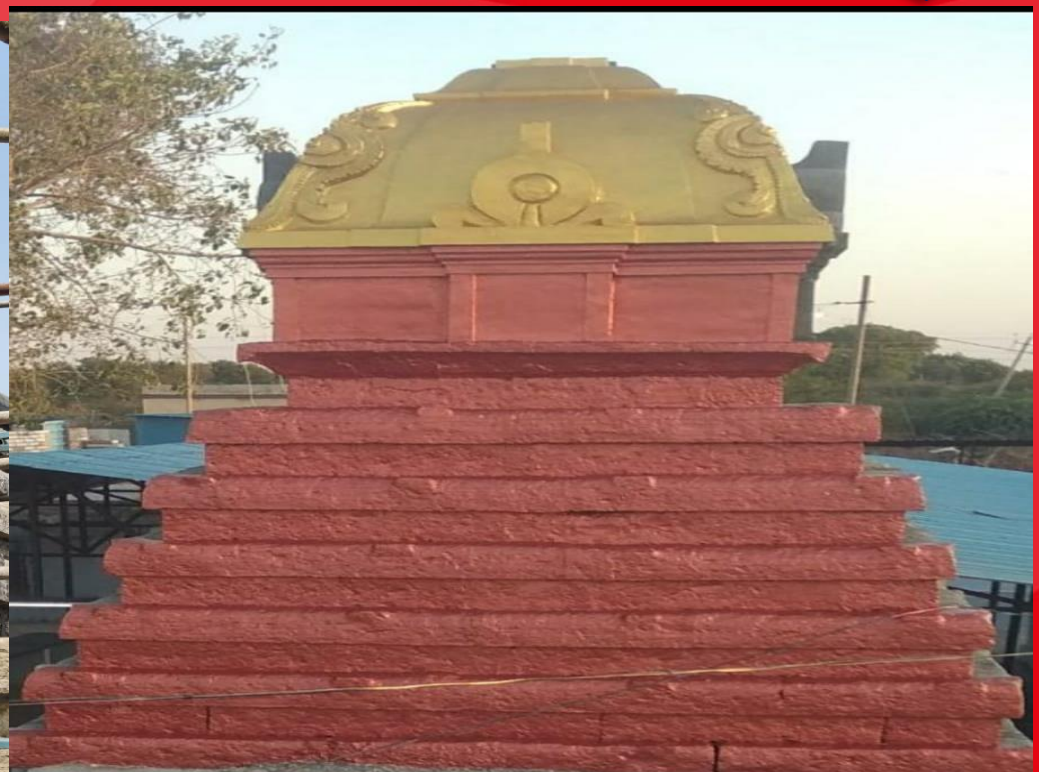

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CELBRATION OF KANNADA SAHITYA SAMMELANA AT CHITTAPUR

The total budget of 6 Laksh under R&R deposited to President Kannada Sahitay Sammelana Chittapur .

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Renovation and Beautification of Government Hospital Building at Chittapur

with Total budget cost of Rs.1.74 Crores executed under our R&R Activities

Under Progress Expected to Complete 31st December, 2023

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RENOVATON & BEAUTIFICATION OF GOVERNMENT HOSPITAL AT CHITTAPUR UNDER R&R ACTIVITIES

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RENOVATON & BEAUTIFICATION OF GOVERNMENT HOSPITAL AT CHITTAPUR UNDER R&R ACTIVITIES

HOSPITAL BEFORE AND AFTER RENOVATION

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CONSTRUCTION OF VEGETABLE MARKET AT CHITTAPUR

with Total budget cost of Rs.104 Lakhs executed under our R&R Activities

Under Progress Expected to Complete

31st March, 2023

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CONSTRUCTION OF VEGETABLE MARKET AT CHITTAPUR UNDER R&R ACTIVITIES

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CONSTRUCTION OF VEGETABLE MARKET AT CHITTAPUR UNDER R&R ACTIVITIES

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CONSTRUCTION OF VEGETABLE MARKET AT CHITTAPUR UNDER R&R ACTIVITIES

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RENOVATION & BEAUTIFICATION OF GOVT MODEL GIRSL PRIMARY & HIGH SCHOOL BUILDING AT CHITTAPUR

with Total budget cost of Rs.12 Crores to be executed under our R&R Activities

The Execution of works have been started and expected to Complete March 2025

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RENOVATION & BEAUTIFICATOIN OF GOVT MODEL GIRLS PRIMARY & HIGH SCHOOL BUILDING AT CHITTAPUR UNDER R&R ACTIVITIES

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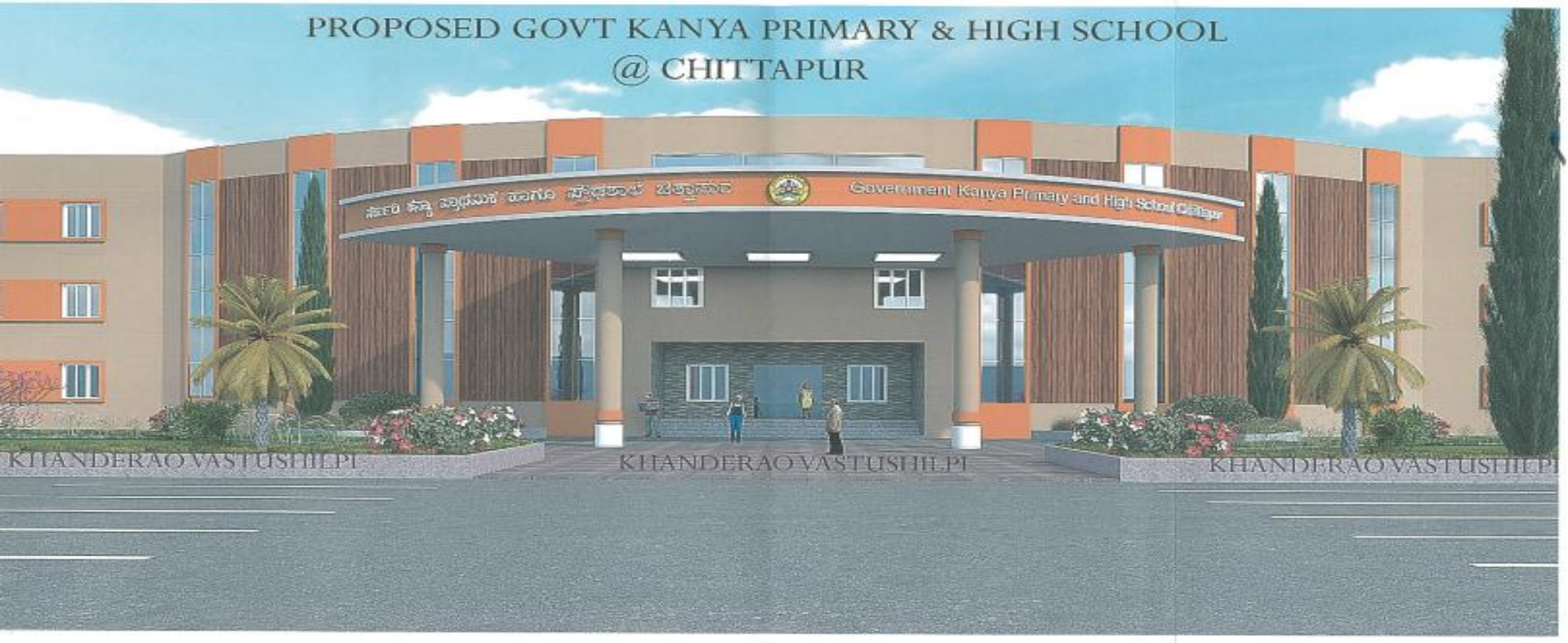

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EXECUTION OF VARIOUS 16 LINE ITEMS TOWARDS DEVELOPMENTOF ROADS & OTHER INFRASTRUCTURES AT VARIOUS VILLAGES OF CHITTAPUR TALUKA

The total budget of 1 Crores under R&R deposited to Asst. Executive Engineer Panchayath Raj Engineering Dept.

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EXECUTION AND LAYING OF CC ROAD FROM MOGALA VILLAGE TO FACTORY

The total budget of 2 Crores under R&R

The letter of Estimation and convering letter awaited from PWD Department .

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REHABILITATION & RESETTLEMENT ACTIVITIES

Thank You